

REMARKS/ARGUMENTS

This amendment is in response to the final office action mailed 09/09/2005 which was responsive to communications filed by applicant on 23 June 2005.

It is respectfully requested that the finality of the office action be withdrawn in order to give the applicant an opportunity to respond to newly cited US Patent No. 5,948,101 to David et al.

In paragraphs 8 and 9, claims 1, 3, 4, 8, 10, 11, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,999,740 to Rowley (hereinafter called Rowley) in view of newly cited US Patent 5,948,101 to David et al. (hereinafter called David).

As claimed in independent claims 1, 8 and 15, the claims include a network comprised of a plurality of first type computers having a limited function range relative to a plurality of second type computers having a respective extended function range. The first type computers include a first subgroup comprising at least one first type computer. The second type of computers include a second subgroup of at least one second type of computers. Reboot requests are issued exclusively from at least one of the second type of computers in the second subgroup to a least one of the first type of computers in the first subgroup, and responsive to the reboot request, sending boot messages from the at least one of the first type computer in the first subgroup to the at least one of the second type computer in the second subgroup for loading the at least one computer of the first subgroup with updated facilities version during continued operation of the unselected plurality of first type computers with a former version means.

Rowley is directed to an updating mechanism for software in which a remote file server has later versions of software to be downloaded onto client computers in a network. Rowley teaches at Col. 2, lines 59-62, "A list of user names indicating which users are permitted to download the application. If no user names are specified, any user is permitted to download the application." Further at Col. 3, lines 26-28, in Rowley, "Each client computer includes an update program 110, which provides a mechanism for updating the software applications installed on that computer, . . ." Also at Col. 5, lines 25-26, "FIGS. 3A and 3B show the operation of the update program 110. This program can be run at any time on request by a user". Thus in Rowley, the user must request to update a program to be run on the client. Col. 3, line 40 to Col. 5, line 21 of Rowley, describes an uploader program in which an administrator uploads to a server or servers, an updated application. In Rowley, the uploaded application on the server or servers, is not for execution of the application on the server, but is to be downloaded by a user from the server upon request by the user (see above).

In David at Col. 1, line 66 to Col. 2, line 2, "Once letterbug 27 has been read, CP 11 broadcasts a boot request containing letterbug 27 over Nodebus 15, STEP 107. Server 17, and all other servers on Nodebus 15 receive the boot request, STEP 109. At Col. 4, lines 37, 39 "The bootstrap program reads seed letterbug 43 and broadcasts a boot request therewith onto the network 15, STEP 123." In David, an Open Modular Controller Letterbug Service in a server 17 manages the distribution of soft Letterbugs to OMCs (Col. 4, lines 17, 18). At power-up or reset, a bootstrap program in an OMC reads seed letterbug 43 and broadcasts a boot request from the seed letterbug onto the network. The boot server responds to the boot request using the

Seed Letterbug by transmitting limited functionality operating system to the requester or a full operating system with a limited set of resources utilized (See David, Col. 4, lines 16-53). Thus, David apparently is directed to establishing two groups at power-up or reset with one group having a limited functionality operating system, or a full operating system with a limited set of resources (See Col. 4, lines 48-53). This is an example of a prior art computer network comprising a plurality of node computers, and where said network has some inner structure of 'competence distribution', in particular a structure in which a first type of server computers and a second type of services computers, in particular embedded controllers or other type of computer function contained in networked stations, exist (see Paragraph [0002]).

In Claim 1, part of what is claimed is:

"providing a network comprised of a plurality of first type computers having a limited function range relative to a plurality of second type computers having a respective extended function range;"

"providing in said network, a service being defined as comprising update services providing an updated facilities version to be performed by the second type computers to said first type computers;"

"selecting a second subgroup comprising at least one of the second type of computers for providing said updated facilities version exclusively to first type computers until a predetermined condition has occurred;"

"issuing reboot requests exclusively from at least one of the second type of computers in said second subgroup to at least one of the first type of computers in said first subgroup;" and

"responsive to said reboot request, sending boot messages from said at least one of the first type computer in said first subgroup to said at least one of said second type computer in

the second subgroup for loading said at least one computer of the first subgroup with said updated facilities version during continued operation of the unselected plurality of first type computers with a former version means." Thus, in claim 1, the dependent computer in the first subgroup does not request the update, as in Rowley, but the supplier computer (second type computer in the second subgroup) exclusively requests the dependent computer (first type computer in the first subgroup) to reboot so that the dependent computer sends boot messages to the supplier computer to send the updated version of the application software. This update method is not taught or suggested in Rowley. This process is disclosed at paragraphs [0062] and [0063] of the present application under "validation of the new code load on dependent nodes". Also, in claim 1, at least one computer in the second subgroup issues requests exclusively to at least one computer in the first subgroup, and responsive to the reboot request, sending boot messages from at least one computer in the first subgroup to at least one computer in the second subgroup for loading the first subgroup computers with updated facilities while unselected first type computers continue operation with the former version. In David, there is no teaching or suggestion that a computer in the first subgroup may exclusively receive updated functionality from a computer having extended functionality in a second subgroup during continued operations of the unselected computers with a former version, as claimed. In David a computer in the first subgroup (OMC 37) issues boot instructions (seed letterbug) to a computer in the second group (server 19) which responds with the limited functionality operating system (see Col. 4, lines 32-54), thereby setting up a subgroup of computers in the network having a limited functionality operating system. There is no teaching or suggestion in David that a subgroup of computers having limited functionality may request a reboot, and responsive to the request, a computer having an extended

functionality send boot messages to a computer having limited functionality to load an updated facilities version during continued operation by unselected computers with a former version, as claimed. Independent claims 8 and 15 have equivalent language. It is submitted that claims 1, 8 and 15, and all claims depended therefrom, are allowable under 35 U.S.C. 103(a), which allowance is respectfully requested.

In paragraph 10, claims 2, 9, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley in view of David and further in view of US Patent No, 6,701,356 to Condict et al. (hereinafter called Condict). The rejection is respectfully traversed, and reconsideration is requested.

Rowley and David are discussed above. Condict discloses a method and apparatus for automatically downloading profile and image files of optical network elements. There is no teaching or suggestion in Condict that the elements of the system be grouped in first and second subgroups where the second subgroup exclusively updates elements of the first subgroup, as claimed in claims 2, 9, and 16. In Conduit col. 2, line 61 to col. 3, line 3, the update of a profile of each network node is described wherein the new software profile file is first downloaded into the memory of each network node as the node control processor secondary software profile file. The secondary node control processor image is then reconciled with the entry in the new software profile. In independent claims 1, 8 and 15 a computer in the second group exclusively sends a reboot request to a computer in the first group, and that computer responds with a boot message for the updated software to be loaded while the other computers in the first subgroup continue to run the old version without interruption. As set out at Col. 3, line 18 of Condict, all secondary images are reconciled with the new software profile in the node control

processor before an the primary and secondary software profile files are switched. In claim 2, a computer in the first subgroup is tested during the continued operation of the unselected first type computers, and if the test results corresponds to a predetermined result, the updated facilities are distributed. It is respectfully submitted that Rowley, David, and Condict, either alone or in combination, do not teach or suggest claims 2, 9, and 16, and that claims 2, 9, and 16 depended from claims 1, 8, and 15, respectively, are allowable, which allowance is requested.

In paragraph 5-7, 12-14, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley in view of David and further in view of US Patent No. 6,480,901 to Weber et al. (hereinafter called Weber). This rejection is respectfully traversed, and reconsideration is requested.

Rowley and David are discussed above. Weber discloses a system for monitoring and managing devices on a network. As discussed at col. 20, lines 35-37, a user 1110 in the client 1102 selects the storage system which it would like updated with the source configuration description. Each of the firmware sets from a firmware repository 1128 are applied to the controller 1126 in the client. After each of the controller firmware sets have been updated, the configuration description is sent to the destination devices (col. 20, lines 53-56). There is no teaching or suggestion in Rowley, David, or Weber, either alone or in combination, that the elements are grouped in first and second subgroups wherein a computer in the second subgroup sends a reboot request to a computer in the first subgroup wherein the first subgroup computer send a boot message to the computer in the second subgroup loading the updated version in a computer in the first group during the operation of unselected computers in the first group with a former version, as claimed in claims 1, 8

and 15. It is submitted that claims 5-7, 12-14, and 19-21, depended from claims 1, 8, and 15, respectively, are allowable over Rowley in view of David, and further in view of Weber, which allowance is respectfully requested.

It is respectfully submitted that the application is now in condition for allowance, which allowance is respectfully requested.

RESPECTFULLY SUBMITTED



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